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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/047,528	01/14/2002	Atsushi Kitagawa	020612	3900

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ARMSTRONG, WESTERMAN & HATTORI, LLP
1725 K STREET, NW
SUITE 1000
WASHINGTON, DC 20006

EXAMINER

CHUNG, DAVID Y

ART UNIT PAPER NUMBER

2871

DATE MAILED: 03/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n No.

10/047,528

Applicant(s)

KITAGAWA ET AL.

Examiner

David Y. Chung

Art Unit

2871

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1, 2, 5-11 and 14-18 rejected under 35 U.S.C. 103(a) as being unpatentable over Kitagawa et al. (JP 2000-321426).

As to claims 1 and 10, Kitagawa et al. discloses a wide visual field angle polarizing plate. Note in figure 1, the polarizing layer 11 laminated on optical compensation film 13 and brightness enhancement film 3 laminated on polarizing layer 11.

Kitagawa et al. is silent regarding whether or not the polarizing layer 11 is laminated on optical compensation film 13 via an adhesive. However, it would have been obvious to one of ordinary skill in the art at the time of invention to laminate the polarizing layer on the optical compensation film without an adhesive because the optical properties of adhesives often caused undesirable optical effects.

As to claims 2 and 11, Kitagawa et al. discloses an optical compensation layer comprising optically anisotropic layer 13 and support film 5. It was conventional for an optically anisotropic layer in a compensator to be formed of a material having a liquid-crystalline property. It would have been obvious to one of ordinary skill in the art at the time of invention to form the optically anisotropic layer of a material having a liquid-crystalline property because it was conventional, and conventional elements had the benefits of well understood behavior and well established supply chains and manufacturing methodologies.

As to claims 5 and 14, Kitagawa et al. discloses that the thickness of the polarizing layer is typically 5 to 80 μm , but is not limited to this range. See column 2, lines 36-38. The thickness of the polarizing layer is a result effective variable. It would have been obvious to one of ordinary skill in the art at the time of invention to discover the optimum thickness for any given polarizing plate, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art.

As to claims 6 and 15, Kitagawa et al. discloses a protective layer 12 disposed on the surface of polarizing layer 11.

As to claims 7 and 16, Kitagawa et al. does not disclose laminating a polarizing layer through coating-application of a polarizing layer forming material. However, this

Art Unit: 2871

was a conventional way of forming a polarizing layer in a laminate structure. It would have been obvious to one of ordinary skill in the art at the time of invention to laminate a polarizing layer through coating-application of a polarizing layer forming material because it was convention, and conventional methods had the benefits of well understood behavior and well established supply chains and manufacturing methodologies.

As to claims 8 and 17, adhesion layers for glass-substrate surfaces were well known and obvious for their ability to securely bond any type of film to a substrate. It would have been obvious to one of ordinary skill in the art at the time of invention to include an adhesion layer for a glass-substrate surface of a liquid crystal display because of the need to securely bond the polarizing film to a substrate.

As to claims 9 and 18, the polarizing plate disclosed by Kitagawa et al. was commonly used in liquid crystal displays because of its ability to improve viewing angle. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to use the polarizing plate of Kitagawa et al. in a liquid crystal display in order to improve view angle.

2. Claims 3, 4, 12 and 13 rejected under 35 U.S.C. 103(a) as being unpatentable over Kitagawa et al. (JP 2000-321426) in further view of Sahouani et al. (U.S. 6,245,399).

Art Unit: 2871

Kitagawa et al. does not disclose a polarizing layer prepared by a lyotropic solution containing a dichroic dye or a liquid-crystal polymer solution containing a dichroic dye.

Sahouani et al. discloses a guest-host polarizer that is formed of a guest pleochroic dye disposed within a host lyotropic liquid crystal matrix. See abstract. Sahouani et al. teaches that the disclosed guest-host polarizer exhibits surprisingly improved heat resistance, especially when applied to a glass substrate and that heat resistance can be important in liquid crystal displays requiring high levels of illumination, since some of the light used for illumination will inevitably be absorbed by the components of the display. See column 3, lines 50-58. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to use the guest-host polarizing layer of Sahouani et al. in the polarizing plate laminate assembly of Kitagawa et al. because of the improved heat resistance.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Chung whose telephone number is (703) 306-0155. The examiner can normally be reached on Monday-Friday from 8:30 am to 5:00 pm.

David Chung
GAU 2871
03/09/03


SUPERVISOR
EXAMINER
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